

**REMARKS**

The following remarks are fully and completely responsive to the Office Action dated January 30, 2004.

Claims 1-10 are pending. Claims 1-6 and 8-10 are rejected. Claim 7 is objected to. Claims 1-10 are presented for reconsideration. All claims are fully supported by the Specification.

**Rejection under 35 U.S.C. § 103(a)**

Claims 1-6 and 8-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. U.S. Patent No. 5,741,182 to Lipps *et al.* ("Lipps") in view of U.S. Patent No. 6,517,438 to Tosaki *et al.* (Tosaki) further in view of U.S. Patent No. 5,414,256 to Gurner *et al.* (Gurner).

Applicants respectfully traverse the obvious rejection and request reconsideration of this rejection.

Lipps discloses a video baseball simulating game and a special bat containing a combination of electronic, mechanical, and optical components for providing infrared radiation or other energy (typically electrical) that is modulated when the player swings the bat and thus actuates a centrifugal switch therein. Receiving and decoding means receive the energy and, responsive thereto, provide digital signals to software in the video game to control an animated batter in the visual display therein.

Tosaki discloses an input device, game device, and method and recording medium for the same. The input device (bat) 50 of Tosaki comprises a holding

section 51, which is held by the player and an end section 52. A trigger switch SW which the player presses at the instant he or she swings the input device 50, and an eccentric motor M which forms vibration transmitting means for transmitting vibrations to the player, are provided in the holding section 51. An acceleration sensor S for detecting the acceleration induced in the input device 50 is provided in the end section 52. When the player moves the input device 1, the acceleration acting on the input device 1 is detected by the acceleration sensor 105. This data is converted to digital data by the encoder 106 and then transmitted to the game processing device 2 via the multiplexer 107.

Gurner discloses an optical controller that is capable of surrounding a player with a radiation screen from a plurality of panels, and enables the player to produce control signals for interface with a controlled instrument such as a musical instrument or a video game processor. The insertion of the appendage of the player can produce a functional control signal. Gurner further discloses IDN as the reference threshold value and IN as the sensing parameter, wherein the computer checks the IN every 30-40 milliseconds and activates the controlled device when the IN rises above a threshold ONIN. If the IN value is between OFFIN and ONIN, no change is effected and the controlled device continues to operate or not operate. If the IN value decreases below OFFIN, the computer generates an off signal and deactivates the controlled device. See, Gurner, column 8, lines 3-36; column 10, lines 19-32.

It is respectfully submitted that the prior art fails to disclose or suggest each and every element of the Applicants' invention. Applicants note that the

only similarity between Gurner and the game apparatus of the present invention is that both inventions are capable of playing an electronic game using the human body and/or an instrument.

Applicants note that the teachings and suggestions of Gurner are neither comparable nor analogous to claim limitations recited in the present invention, particularly with respect to how to detect the motion of the input device in three dimensional space and how to process the detected information to control the game.

Applicants note that, in the present invention, the signal output means is enabled when the level of acceleration correlated signal is equal to or larger than the predetermined level. The present invention is distinguishable from Gurner, specifically the lines 19-29, column 10 which were cited by the Examiner, in the following ways:

- (1) the kind of the signal to be made as the reference of determination, and the producing method thereof;
- (2) the processing when the threshold is exceeded or not exceeded; and
- (3) the effect of the processing performed in accordance with the result of determination.

With respect to point (3) above, Applicants note that the signal output in the present invention is disabled when the level of the acceleration correlated signal is less than the predetermined level. Gurner does not teach or suggest this feature. Therefore, the present invention offers advantages, such as saving

power consumption of the input device and lowering processing load of the game processor. Gurner does not offer such advantages.

Moreover, Applicants reiterate that neither Gurner, nor the other references appear to teach or suggest at least the element of an "enabling means for enabling said signal output means to output the acceleration correlated signal when a level of the acceleration correlated signal is equal to or larger than a predetermined level."

Applicants traverse the Office Action's reliance on Gurner (specifically column 10, lines 19-32) as teaching and suggesting this element. According to this cited text, Gurner discloses,

"During normal operation, the computer checks the IN every 30-40 milliseconds. If the IN value rises above ONIN, the computer operates an 'on' signal, viz. activates the controlled device (e.g., video/computer game, electronic musical device or interface). If the IN value is between OFFIN and ONIN, no change is effected and the controlled device continues to operate or not to operate, as the case may be. If the IN value decreases below OFFIN, the computer generates an 'off' signal, viz. deactivates the controlled device. The gap between the two thresholds prevents noise from sending such "on" and "off" signals at inappropriate values of IN."

Applicants submit that this disclosure in Gurner is not comparable or analogous to the recitation in claim 1. In particular, this disclosure does not account for the "enabling means for enabling said signal output means to output

the acceleration correlated signal when a level of the acceleration correlated signal is equal to or larger than a predetermined level." Nowhere does Gurner teach or suggest this limitation. In view of the above arguments with respect to claim 1, Applicants submit that claim is allowable.

Applicants further submit that claims 2-6 and 8-9 are dependent on claim 1, and are allowable for at least the foregoing reasons. Accordingly, reconsideration and withdrawal of the obviousness rejection of claims 1-6 and 8-9 are requested.

Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Lipps in view of Tosaki and further in view of Gurner as applied to claim 3 and yet further in view of U.S. Patent No. 5,833,549 to Zur et al. ("Zur").

Zur discloses an arrangement for use in training players of a game during a simulated game session. The arrangement is designed in such a manner as to provide an accurate set of measured values from which a ball trajectory can be reliably determined.

Applicants note that Zur does not cure the deficiencies of Lipps, Tosaki, Gurner or any combination thereof. More particularly, the references either alone or in combination do not appear to teach or disclose an "enabling means for enabling said signal output means to output the acceleration correlated signal when a level of the acceleration correlated signal is equal to larger than a predetermined level," as recited in claim 1. Thus, as claim 1 appears to be distinguishable from the prior art, dependent claim 10 is distinguishable for at least this reason.

**Allowable Subject Matter**

The Office Action admits that claim 7 would be allowable if rewritten in independent form. Claims 7 ultimately depends from claim 1, which is allowable for at least the reasons discussed above. Therefore, Applicants request reconsideration and withdrawal of the objection to claim 7.

**Conclusion**

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of claims 1-10 and the prompt issuance of a Notice of Allowability are respectfully solicited.

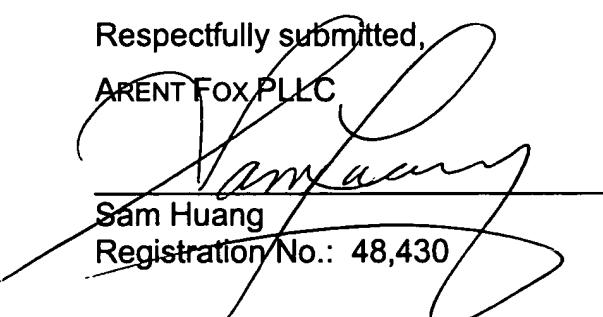
Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

Application Serial No.: 09/175  
Inventor(s): UESHIMA et al.  
Attorney Docket No.: 100341-00008

In the event this paper is not considered to be timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, referencing docket number 100341-00008.

Respectfully submitted,

AREN'T FOX PLLC

  
Sam Huang

Registration No.: 48,430

Customer No.: 004372

1050 Connecticut Avenue, N.W.  
Washington, D.C. 20036-5339

Telephone No.: 202-857-6000  
Facsimile No.: 202-638-4810

WC/SH/RN/ccd